

IN THE SPECIFICATION:

Kindly amend the specification as follows:

Kindly replace lines 2-6 on page 2 with the following:

$[[m\alpha, m\beta]] \underline{m}_\alpha, \underline{m}_\beta$: Desired boundary values in the speech model; and
 $[[m^{(n)}_\alpha, m^{(n)}_\beta]] \underline{m}^{(n)}_\alpha, \underline{m}^{(n)}_\beta$: nth iteration boundary values for the desired boundary values $[[m\alpha]] \underline{m}_\alpha$ and $[[m\beta]] \underline{m}_\beta$, respectively.

$\lambda^{(n)}_\alpha$: The n-th iteration value for the free parameter $[[\lambda\alpha]] \underline{\lambda}_\alpha$;

$[[t\alpha, t\beta]] \underline{t}_\alpha, \underline{t}_\beta$: Convergence increments;

Kindly replace line 3 on page 2 with the following:

...3, is shown in Fig. $[[5]] \underline{4}$. Attributes can generally represent individual words, strings of

Kindly replace lines 4-8 on page 3 with the following:

which, in accordance with a predefined criterion, the adaptation of the iteration values $[[m^{(n)}_\alpha]] \underline{m}^{(n)}_\alpha$ to the respective associated desired boundary values $[[m\alpha]] \underline{m}_\alpha$ is the worst of all the m attribute groups of the speech model.

As this invention assigns attribute groups $[[Ai(n)]] \underline{A}_{i(n)}$ to individual iteration

Kindly replace line 11 on page 3 with the following:

group $[[Ai(n)]] \underline{A}_{i(n)}$ to the iteration parameter n no longer takes place cyclically, but instead occurs in

Kindly replace lines 15-16 on page 3 with the following:

According to the first example of embodiment of the invention ~~as claimed in patent claim 2~~, the criterion for selecting the most suitable attribute group $[[Ai]] \underline{A}_i$ for the iteration

Kindly replace line 26 on page 3 with the following:

λ - and with it the mathematical function $G()$ in ~~patent claim 1~~ - is
advantageously as

Kindly replace line 2-3 on page 4 with the following:

above as formula (1). As in the cyclical version, the free parameters $[[\lambda\alpha]] \lambda_{\alpha}$ are adapted as shown in formula 1a. Here, all attributes α of the selected group $[[A_i(n)]] A_{i(n)}$ are processed.

Kindly replace lines 14-15 on page 4 with the following:

System and a training arrangement based on the maximum entropy speech model
~~, as claimed in patent claims 8 and 9.~~ The advantages of this speech recognition system
and the training

Kindly replace line 24 on page 5 with the following:

model is obtained by applying the attribute function $[[f\alpha]] f_{\alpha}$ to a training corpus
and then

Kindly replace lines 6-7 on page 6 with the following:

The n-th iteration boundary value $[[m^{\alpha}]] m_{\alpha}^{(n)}$ represents an iterative
approximation for the desired boundary values $[[m\alpha]] m_{\alpha}$ defined above. The n-th
iteration boundary value $[[m^{\alpha}]] m_{\alpha}^{(n)}$ is

Kindly replace line 6 on page 7 with the following:

boundary values $[[m\alpha]] m_{\alpha}$. The criterion is best described in
mathematical form as follows:

Kindly replace lines 22 on page 7 with the following:

In method step S1/8, the attribute group $[[A_i(n)]] \underline{A}_{i(n)}$ with the largest need for

Kindly replace line 26 on page 7 with the following:

group $[[A_i(n)]] \underline{A}_{i(n)}$ before the iteration parameter n is incremented by 1.

The iteration values $\lambda_{\alpha}^{(n+1)}$

Kindly replace lines 1-14 on page 16 with the following:

The invention relates to a speech recognition system and a method of calculating iteration values for free parameters $[[\lambda_{\alpha}]] \underline{\lambda}_{\alpha}$ of the maximum entropy speech model. In the state of the art it is known that these free parameters $[[\lambda_{\alpha}]] \underline{\lambda}_{\alpha}$ can be approximated cyclically and iteratively, for example, using a GIS training algorithm. Cyclically in this case is understood to mean that for each iteration step n a cyclically predefined attribute group $[[A_i(n)]] \underline{A}_{i(n)}$ of the speech model is evaluated in order to calculate the $n+1$ iteration value for the free parameters. An attribute group $[[A_i(n)]] \underline{A}_{i(n)}$ with such a rigid cyclical assignment is not always the best solution, however, for ensuring the fastest and most effective convergence of the GIS training algorithm in a given situation. Therefore, a method is proposed in the context of this invention, which will assist at choosing the attribute group that is the most suitable in this respect, while the degree of adaptation of iteration boundary values $m_{\alpha}^{(n)}$ to respective associated and desired boundary values m_{α} for all attributes of the relevant attribute group serves as a criterion for choosing the attribute group.

Fig. 1.